

TROPICAL RAINFALL MEASURING MISSION

October 15, 2001 - October 21, 2001

DOY 288 - 294

Day of Mission 1418 - 1424

TRMM MISSION OPERATIONS

- TRMM is flying in the -X Forward direction as of October 7th (01-280) at 09:45:23z.
- Yaw maneuver #64 to +X Forward is currently scheduled for November 4th (01-308).
- Delta-V #345 is scheduled for October 23rd (01-296), using the ISP thrusters.
- The Beta angle range for 01-295 to 01-301 is -45.2° to -26.1°.
- The next Configuration Control Board (CCB) is scheduled for October 23rd (01-296).
- The next Monthly Status Review (MSR) is scheduled for October 31st (01-304).

TRMM SUBSYSTEM OPERATIONS

Attitude Control System (ACS)

01-290 (Wednesday, October 17th)

Delta-V maneuver #343 was successfully conducted at 14:19:08z and 15:05:25z for durations of 29.000 and 18.000 seconds respectively, using the ISP thrusters. The off-modulation of the -Pitch thruster (#6) for burns 1 and 2 was 40.1% and 37.5% (59.9% and 62.5% on time). The remaining fuel is 337.437 kg, the current GN2 pressure is 337.5 psia, and the final apogee and perigee height is 407.08 km x 399.64 km.

01-293 (Saturday, October 20th)

Delta-V maneuver #344 was successfully conducted at 14:50:23z and 15:36:38z for durations of 22.750 and 17.750 seconds respectively, using the ISP thrusters. The off-modulation of the -Pitch thruster (#6) for burns 1 and 2 was 34.6% and 34.5% (65.4% and 65.5% on time). The remaining fuel is 336.483 kg, the current GN2 pressure is 337.5 psia, and the final apogee and perigee height is 407.06 km x 399.73 km.

Flight Data System (FDS)/Command & Data Handling (C&DH)

The UTCF was adjusted by -914.5 μ s on October 15th (01-288). The new value is 31535996.816272 seconds. The current drift value is -409.0 μ s. The Frequency Standard remains at x'7D2' with a current drift rate of -2.99 μ s/hr.

Reaction Control Subsystem (RCS)

The RCS subsystem performed nominally during this period. See the ACS Subsystem section for specific Delta-V performance information.

Power Subsystem

The Power subsystem performed nominally during this period.

Electrical Subsystem

The Electrical subsystem performed nominally during this period.

Thermal Subsystem

The Thermal subsystem performed nominally during this period.

Deployables Subsystem

The Deployables subsystem performed nominally during this period.

RF/Communications Subsystem

The RF/Communications subsystem performed nominally during this period.

SPACECRAFT INSTRUMENTS

CERES

CERES was powered off on 01-149 (Tuesday May 29th, 2001).

LIS

The LIS instrument performed nominally during this period.

A routine command request to reduce accumulation of packet sequence errors was performed on October 19th (01-292).

PR

The PR instrument performed nominally during this period.

The list of Internal Calibration times over Australia in which PR was not radiating is shown below:

01-288-13:46:15z – 13:49:42z	01-291-19:10:55z – 19:13:10z
01-288-21:55:39z – 21:57:43z	01-292-11:42:42z – 11:45:12z
01-289-21:00:43z – 21:02:52z	01-292-19:51:14z – 19:53:23z
01-290-20:05:41z – 20:07:54z	01-293-18:56:26z – 18:58:36z
01-291-12:35:40z – 12:40:28z	01-294-18:01:40z – 18:03:52z

TMI

The TMI instrument performed nominally during this period.

VIRS

The VIRS instrument performed nominally during this period.

GROUND SYSTEM

Event Reports

No event reports were generated during this period.

Generic Late Acquisition Reports (for TTRs 19639)

No generic late acquisitions occurred during this period.

New Anomalies

No new anomalies recurred during this period.

Recurring/Open Anomalies

No open anomalies recurred during this period.

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